## Determination of Public Land (Rangeland) Health for 65017 JAMES SOUTHARD

The Record of Decision (ROD) for the New Mexico Standards for Public Land Health and Guidelines for Livestock Grazing Management (dated January 2001) adopted three Standards for Public Land Health. These are (1) Upland Sites Standard, (2) Biotic Communities, Including Native, Threatened, Endangered, and Special Status Species Standard and (3) Riparian Sites Standard.

The ROD also established a process for the BLM Field Offices for the implementation. Through a public participation process, the Roswell Field Office developed and adopted indicators to use in conjunction with existing monitoring data to assess these standards.

Field assessment worksheets and other available data that evaluate local indicators were completed for this allotment. Based on these assessments, it is my determination that public land within James Southard, allotment #65017, meets Upland Sites standard and (2) Biotic Communities, including Native, Threatened, Endangered, and Special Status Species standard. There are no public land Riparian areas on this allotment, therefore this standard was not addressed.

/s/ Eddie Bateson Field Manager 8/8/2006

Date

#### Standards of Public Land Health Evaluation of 65017 JAMES SOUTHARD Allotment [ 10/15/2005 ]

The Roswell Field Office conducted a rangeland health assessment at one ()1 study site within the James Southard allotment #65017. This assessment evaluated Soil/Site Stability, Hydrologic Function and Biotic Integrity indicators within the study site location. Existing monitoring data was incorporated into and in support of field assessments. A summary of each assessment is attached and shown in the following table.

Study Area	UPLAND			BIOTIC			RIPARIAN		
or Assessment Area	Meets	I		Meets	I		Meets	Monitor an Indicator	Does Not Meet
65017-SEC 8- C026	X			X	*		N/A		

Twenty-two (22) indicators for Rangeland Health were evaluated for public land on James Southard, allotment #65017. Ten of these assessed soil site stability, 11 hydrologic function and 13 biotic integrity. These qualitative assessments in conjunction with quantitative information gathered from previous data collected on one location were utilized to assess the rangeland health of public land within this allotment. This allotment is a "C" (custodial) category due to small amounts of public land present.

Section 8 Pasture is a CP-2 (Pecos-Canadian Plains & Valleys) Sandy Plains ecological site encompassing 363 acres/150 hectares. Soil is (RPD) Roswell-Jalmar fine sand, hilly occurring on high terraces in eastern parts of area surveyed. Elevation is 3,900 ft/1,181 m to 4,100/1,242 m. Roswell soil occurs on hummocky sand dunes and Jalmar is in depressional and interdunal areas. These soil units formed in eolian and alluvial deposits and are deep and well-drained. Cattle were observed at evaluation in this pasture and utilizing at conservative levels. Bare ground and annual production both rated Moderate. Bare ground was estimated at 40 percent which approaches upper ends of range expected and exceeds long-term average of 26.5 percent. Annual production was estimated at 500 lbs/ac or kg/ha. This is 1/2 and 1/4 of long-term average and ESD figures respectively. Lesser prairie chicken (Tympanuchus pallidicinctus) tracks were observed in this area. Sand bluestem (Andropogon hallii) clumps were observed but scarce. Shinnery oak (Quercus havardii), sand sage (Artemesia filifolia) and prickly pear (Opuntia engelmannia) are some shrubs observed in addition to yucca (Yucca spp.) and snakeweed Gutierrezia sarothrae). Little bluestem (Schizachyrium scoparium) and dropseed (Sporobolus spp.) are abundant in dunes and interspaces respectively. Proportions of shinnery to grass is adequate for LPC nesting cover and rates special status species and wildlife habitat Slight to Moderate. Those remaining indicators assessed exhibited normal range of variability from ecological site and reference areas.

In the professional opinion of Assessment Team, public land within James Southard, allotment #65017 meets Upland and Biotic standards. There are no Riparian issues present, therefore this standard was not addressed. See site notes and recommendations for further information regarding evaluations on this allotment.

**Recommendations:** Current management practices should continue for this allotment. Conservative use levels are advantageous to LPC nesting cover. Locations of water and other improvements should only serve to enhance wildlife habitat and protect watershed attributes.

RFOs	Upland a	and Biotic Standa	rd A	sses	sment Si	ımmary	Workshe	et
		SITE 6501	<b>7-SE</b>	C 8	<b>3-C026</b>			
Legal I	Land Desc	NENE 8 0070S 0310 Meridian 23			Acreage	363		
	Ecosite	070BY055NM SAN PLAINS CP-2	DY		Ph	oto Taken	Y	
V	Watershed	13060003210 RAILROAD MOUNTAIN						
ı	Observers	ARTHUN/MOE			Observ	ation Date	01/11/200	6
County So	21 11111/21	NM644 CHAVES NORTH			Soil '	Var/Taxad		
Soil	Map Unit	RPD			Soil Ta	xon Name	ROSWEL	L
Tex	ture Class	NM644 FS			,	Soil Phase	ROSWEL JALMAR	
Texture	e Modifier	NM644 FINE SANDS,HILLY						
Obse Annual Pre	erved Avg			Observed Avg Growing Season Precipitation				
	A Annual ecipitation	1955			NOAA Growing Season Precipitation		יו וי	
NOAA Av	vg Annual ecipitation	15.7		NOAA Avg Growing Season Precipitation			13.34	
	ances and imal Use:	Livestock observed;	LPC	tracl	ks also we	re seen.		
Part 2. Att	ributes an	nd Indicators						
						ological Sit	te ence Areas	
Attribute	Indicator	s	Extre		Moderate to Extreme	Moderate	Slight to Moderate	None to Sligh
S H	Rills							X
Comments:								
SH	Water Flo	ow Patterns					X	
Comments:								
S H	Pedestals	and/or Terracettes					X	
Comments:								

SH	Bare Ground			X				
Comments:	40% is the current estimate.							
SH	Gullies				X			
Comments:	Some gullying activity by the road.							
S	Wind-scoured, Blowouts, and/or Deposition Areas				X			
Comments:								
Н	Litter Movement				X			
Comments:	Shinnery oak leaves are piling	with son	ne moveme	nt.				
SHB	Soil Surface Resistance to Erosion				X			
Comments:	Interspace melted/canopy held	together	•					
SHB	Soil Surface Loss or Degradation				X			
Comments:								
Н	Plant Community Composition and Distribution Relative to Infiltration and Runoff				X			
Comments:								
SHB	Compaction Layer					X		
Comments:								
В	Functional/Structural Groups				X			
Comments:								
В	Plant Mortality/Decadence					X		
Comments:								
НВ	Litter Amount					X		
Comments:	60% is the current estimate.							
В	Annual Production			X				
Comments:	500 lbs/ac or kg/ha is the curre	ent estima	ite.					
В	Invasive Plants					X		
Comments:								
В	Reproductive Capability of Perennial Plants					X		
Comments:								
S	Physical/Chemical/Biological Crusts				X			

Comments	Physical/biological crusts	observed.				
В	Wildlife Habitat				X	
Comments		·				
В	Wildlife Populations				X	
Comments	Good deer and pronghorn.					
В	Special Status Species Habitat				X	
Comments	Good LPC nesting but cou	ıld use more s	and bluest	em		
В	Special Status Species Populations					X
Comments	Good LPC pops					
Part 3. Sui		1	• . 1	*.1	6.1	
A. Indicato attributes b	r Summary - Each of the incelow. An indicator is placed Standard Attributes.					
A. Indicato attributes b	r Summary - Each of the inceled the incele					None to
A. Indicato attributes be each of the Standard	r Summary - Each of the inceled the incele	d in a category	Moderate to	) above an	d summed Slight to	None to
A. Indicato attributes be each of the Standard Attribute	r Summary - Each of the incelow. An indicator is placed Standard Attributes.	Extreme	Moderate to Extreme	) above an	Slight to Moderate	None to Sligh
A. Indicato attributes be each of the Standard Attribute	r Summary - Each of the incelow. An indicator is placed Standard Attributes.  Soil	Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Sligh

B. Attribute Summary. In this table, the Extreme and Extreme to Moderate columns in the table above are merged for the *Does not Meet* column, Moderate becomes *May Need More Info*, and Slight to Moderate and None to Slight merge to form the *Meets* columns. Values from the table are summarized below. Space is provided for rationale of the determination. This space should most certainly be used when the determination by the ID team conflicts with the summarized values. Provide the sources of information that lead to the determination. X out the appropriate box for each attribute to denote final agreed upon determination by the ID team.

Attribute	Rationale	Does Not Meet	May Need More Info	Meets
Soil		0	1	9
Hydrologic		0	1	10

Biotic		0	1	12				
Site Notes:	Site Notes: This site was gps'd to verify coordinates. Livestock observed. Little and sand							
bluestem ob	served in dunal areas. The usual component of shru	ubs is adeq	uate.					

## **Functional / Structural Groups**

**Report Parameters** 

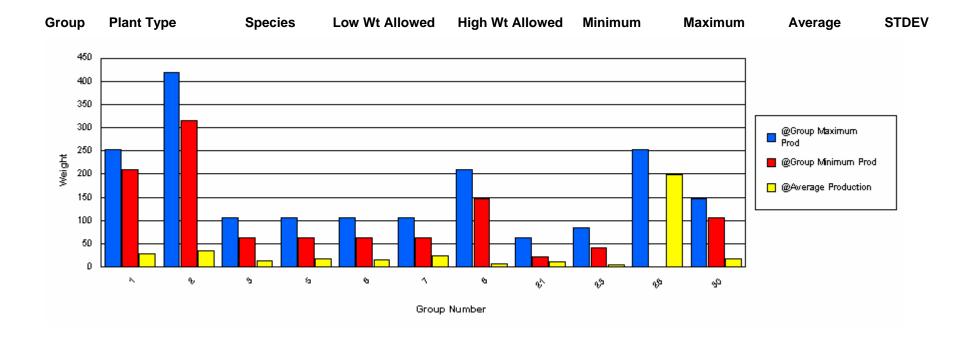
SITE NAME LIKE 65017-SEC 8-C026

ON/AFTER 10/01/1978 ON/BEFORE 09/30/2005

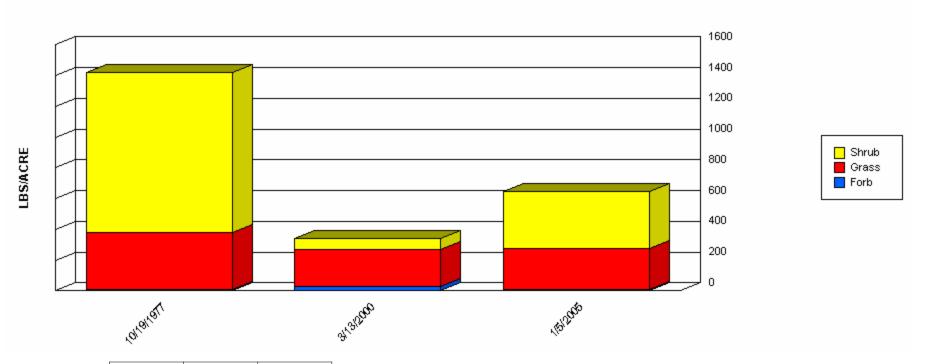
MIN LBS TO GRAPH 1

SELECTED ECOSITE 070BY055NM

Group	Plant Type	Species	Low Wt Allowed	High Wt Allowed	Minimum	Maximum	Average	STDEV
1	Grass	ANHA	210	252	18.95	37.05	28.00	9.05
2	Grass	ANSC2	315	420	15.20	51.84	33.52	18.32
3	Grass	EROX	63	105	0.00	14.40	7.20	7.20
3	Grass	PAST6	63	105	0.00	12.74	6.37	6.37
5	Grass	BOHI2	63	105	5.87	30.80	18.34	12.47
6	Grass	ARIST	63	105	0.00	28.83	14.42	14.42
7	Grass	LECO	63	105	0.53	46.98	23.76	23.23
8	Grass	SPCR	147	210	0.00	14.56	7.28	7.28
21	Forb	ERIOG	21	63	0.00	22.44	11.22	11.22
23	Forb	AAFF	42	84	0.45	7.44	3.95	3.50
26	Shrub	QUHA3	0	252	54.00	342.24	198.12	144.12
30	Shrub	ARFI2	105	147	18.13	18.20	18.17	0.03



#### **Production Lbs/Acre Trends**



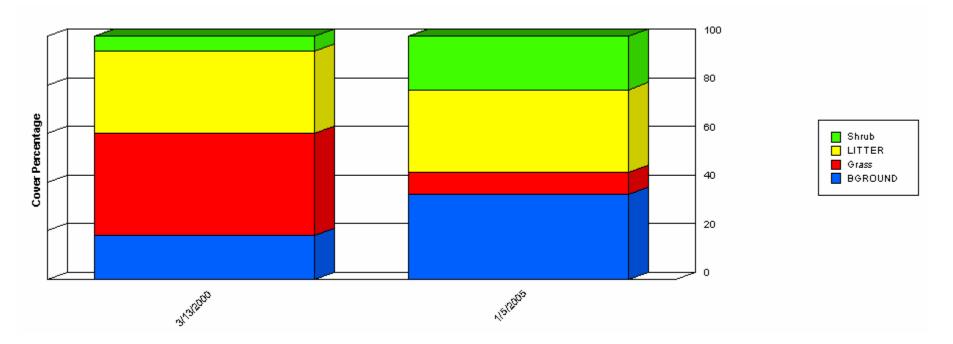
	10/19/1977	3/13/2000	1/5/2005
Forb	8.00	29.88	10.88
Grass	372.00	237.20	263.75
Shrub	1,041.00	72.20	370.77
Total	1,421.00	339.28	645.40

#### **Report Parameters**

SITE NAME LIKE 65017-SEC 8-C026

ON/AFTER 10/01/1977 ON/BEFORE 09/30/2005

## **Ground Cover Trends**



	3/13/2000	1/5/2005
BGROUND	18.00	35.00
Grass	42.00	9.00
LITTER	34.00	34.00
Shrub	6.00	22.00
Total	100.00	100.00

## **Robel Pole Summary over Time Report**

Report Parameters
SITE NAME LIKE 65017-SEC 8-C026
ON/AFTER 10/01/2004
ON/BEFORE 09/30/2006

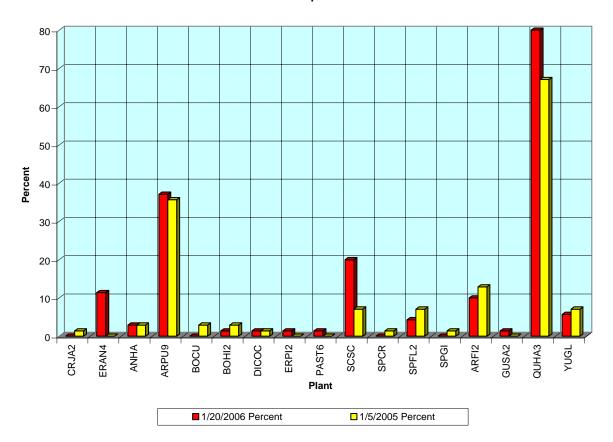
	Primary Obstructions	65017-SEC 8-C026	65017-SEC 8-C026
		01/20/2006	01/05/2005
	Flag Stations	1	0
		% Hits	% Hits
Nv	BGROUND	34.3 %	35.7 %
Nv	LITTER	48.6 %	44.3 %
G	ARPU9	0.0 %	5.7 %
G	DICOC	0.0 %	1.4 %
G	PAST6	1.4 %	0.0 %
G	SCSC	1.4 %	1.4 %
S	ARFI2	0.0 %	4.3 %
S	QUHA3	14.3 %	5.7 %
S	YUGL	0.0 %	1.4 %

## **Robel Pole Summary over Time Report**

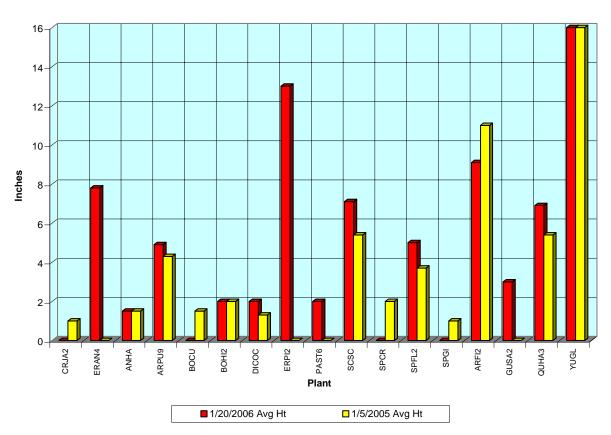
# Report Parameters SITE NAME LIKE 65017-SEC 8-C026 ON/AFTER 10/01/2004 ON/BEFORE 09/30/2006

	Secondary Obstructions	65017-SE	C 8-C026	65017-SE	C 8-C026
		01/20/	01/20/2006		2005
		Percent	Avg Ht	Percent	Avg Ht
F	CRJA2	0.0	0.0	1.4	1.0
F	ERAN4	11.4	7.8	0.0	0.0
G	ANHA	2.9	1.5	2.9	1.5
G	ARPU9	37.1	4.9	35.7	4.3
G	BOCU	0.0	0.0	2.9	1.5
G	BOHI2	1.4	2.0	2.9	2.0
G	DICOC	1.4	2.0	1.4	1.3
G	ERPI2	1.4	13.0	0.0	0.0
G	PAST6	1.4	2.0	0.0	0.0
G	SCSC	20.0	7.1	7.1	5.4
G	SPCR	0.0	0.0	1.4	2.0
G	SPFL2	4.3	5.0	7.1	3.7
G	SPGI	0.0	0.0	1.4	1.0
S	ARFI2	10.0	9.1	12.9	11.0
S	GUSA2	1.4	3.0	0.0	0.0
S	QUHA3	80.0	6.9	67.1	5.4
S	YUGL	5.7	16.0	7.1	16.0

#### **Plant Composition**



#### **Plant Average Visual Obstruction Height**



#### Plant Type Average Visual Obstruction Height

